

ALL STAINLESS STEEL TRANSDUCER MULTIMEDIA COMPATIBILITY HIGH-PERFORMANCE SILICON TECHNOLOGY



PX309 Series
0-1 to 0-10,000 psi
0-0.07 to 0-690 bar
100 mV, 0 to 5 V,
and 4 to 20 mA Outputs

Starts at
\$175

**LARGE
INVENTORY**
Fast Shipment!



NEW!
PRESSURE TRANSDUCERS
B



- ✓ **New 1, 2 & 5 psi Ranges!**
- ✓ All Stainless Steel Construction
- ✓ Gage or Absolute Pressure
- ✓ Rugged Solid State Design
- ✓ High Stability, Low Drift
- ✓ 0.25% Accuracy Typical
- ✓ IP 65 Protection Class

PX319-100GV, \$215
with Mini DIN
Connector



PX309-100GV, \$175,
with wire leads



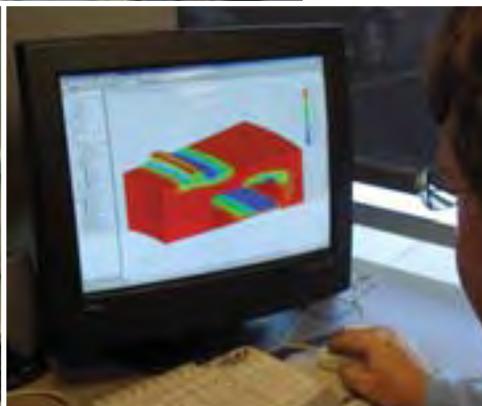
PX329-100GV, \$235
Twist-Lock Connector



All models shown actual size.



We provide a complete range of services—from product inception, through design and prototypes, to manufacturing and testing. Our application engineers work closely with our customers to **customize, design** or create entirely **new products**. Call us—whether you're an OEM,



**Engineered from
1 to 10,000 psi.
New Low Ranges:
1, 2 & 5 psi.**



RUGGED, GENERAL PURPOSE TRANSDUCER COMMON SPECIFICATIONS

mV Output Wiring			
Wiring	Cable	Mini DIN	Twist-Lock
Excitation (+)	Red	Pin 1	Pin A
Output (+)	White	Pin 3	Pin C
Output (-)	Green	Pin 4	Pin D
Excitation (-)	Black	Pin 2	Pin B
Spare Vent		Pin 5	Pin E
		Pin 6	Pin F

5 Vdc Output Wiring			
Wiring	Cable	Mini DIN	Twist-Lock
Excitation (+)	Red	Pin 1	Pin A
Excitation (-)	Black	Pin 2	Pin B
Output (+)	White	Pin 3	Pin C
N/C†		Pin 4	Pin D
Spare Vent			Pin E
			Pin F

mA Output Wiring			
Wiring	Cable	Mini DIN	Twist-Lock
Supply (+)	Red	Pin 1	Pin A
Supply (-)	Black	Pin 2	Pin B
N/C†		Pin 3	Pin C
N/C†		Pin 4	Pin D
Spare Vent			Pin E
			Pin F

† N/C: Do not connect any wires to this pin.

Dimensions: mm (in)

Mini DIN: 30 (1.2) length

Twist-Lock: 22 (0.88) DIA, 56 (2.2) max length, 16 (0.63) max length for the hex part, 7/8" HEX

Twist-Lock Connector: 16 (0.63) length

Cable: 1.5 m (5') length, 30 (0.8) max length for the connector part

COMMON SPECIFICATIONS

OMEGA's PX309 Series models below 100 psi use a high-accuracy silicon sensor protected by an oil-filled stainless steel diaphragm. Units 100 psi and above use silicon strain gages molecularly bonded to the stainless steel diaphragm

Long-Term Stability (1 Year):

±0.25% typical

Typical Life: 10 million cycles typical

Operating Temperature: -40 to 85°C (-40 to 185°F)

Proof Pressure:

All psia and ≤50 psig Ranges:

3x capacity or 20 psi, whichever is greater

100 psig Ranges: 2x capacity

Burst Pressure: 500% of capacity or 25 psi, whichever is greater

Response Time: <1 ms

Shock: 50 g, 11 ms half-sine

Vibration: ±20 g

Protection Class: IP 65

Wetted Parts:

316 SS for all psia and 1 to 50 psig ranges; 17-4 PH stainless steel for ranges 100 to 10,000 psig

Pressure Port: 1/4-18 MNPT

Electrical Connections:

PX309: 1.5 m (5') 2-, 3-, or 4-conductor cable (mA, 5V, mV outputs, respectively)

PX319: Mini DIN connector with

Compatible Meters/Controllers for PX309 Series Pressure Transducers

Starting at \$195, the iSeries is available in 1/2, 1/4, and 1/8 DIN programmable process controllers with serial and embedded Internet/Ethernet communications (Order EI Option CNI16D). The iSeries features programmable color displays, free software and ActiveX Controls, selectable full autotune PID control, and NEMA 4 (IP65) rated front bezel. Ordering Examples: DPiS8, strain/process (monitor only), 1/2 DIN, \$300; CNI58, strain/process controller with 2 control outputs, \$370.



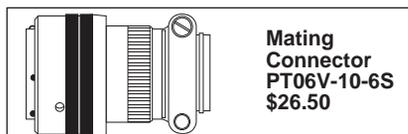
mating connector included
PX329: Twist-lock connector, vented mating connector sold separately (PT06V-10-6S)

Weight:

PX309: 154 g (5.4 oz)

PX319: 100 g (3.5 oz)

PX329: 100 g (3.5 oz)



Order a snubber to protect your pressure transducer!



PS-4G, \$10, shown actual size.

Snubbers protect sensors from fluid hammers/spikes.

HOW TO ORDER PX309 SERIES RUGGED, GENERAL PURPOSE TRANSDUCERS WITH 100 mV OUTPUTS

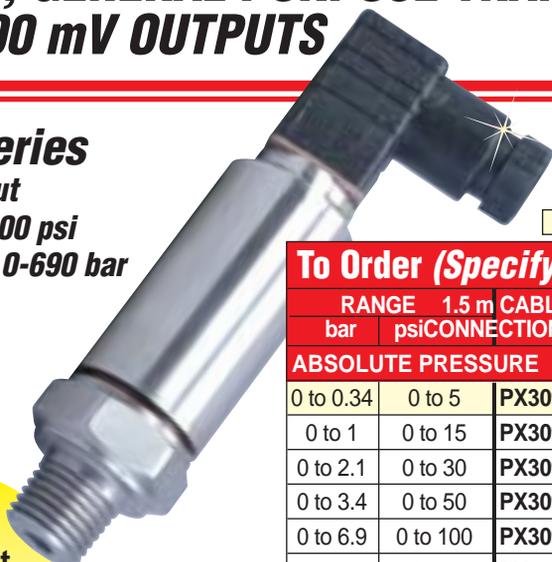


PX309 Series

100 mV Output

0-1 to 0-10,000 psi

0-70 mbar to 0-690 bar



PX319-050GV, \$175, mini DIN connector included, shown smaller than actual size.

NEW, LOW-PRESSURE RANGES HIGHLIGHTED

To Order (Specify Model Number)

RANGE bar	1.5 m psi	CABLE CONNECTION	PRICE	MINI DIN CONNECTION	PRICE	WIST-LOCK CONNECTION	PRICE
ABSOLUTE PRESSURE							
0 to 0.34	0 to 5	PX309-005AV	\$300	PX319-005AV	\$300	PX329-005AV	\$300
0 to 1	0 to 15	PX309-015AV	195	PX319-015AV	215	PX329-015AV	235
0 to 2.1	0 to 30	PX309-030AV	195	PX319-030AV	215	PX329-030AV	235
0 to 3.4	0 to 50	PX309-050AV	195	PX319-050AV	215	PX329-050AV	235
0 to 6.9	0 to 100	PX309-100AV	195	PX319-100AV	215	PX329-100AV	235
0 to 14	0 to 200	PX309-200AV	195	PX319-200AV	215	PX329-200AV	235
0 to 21	0 to 300	PX309-300AV	195	PX319-300AV	215	PX329-300AV	235
GAGE PRESSURE							
0 to 0.07	0 to 1	PX309-001GV	\$300	PX319-001GV	\$300	PX329-001GV	\$300
0 to 0.14	0 to 2	PX309-002GV	300	PX319-002GV	300	PX329-002GV	300
0 to 0.34	0 to 5	PX309-005GV	300	PX319-005GV	300	PX329-005GV	300
0 to 1	0 to 15	PX309-015GV	175	PX319-015GV	175	PX329-015GV	215
0 to 2.1	0 to 30	PX309-030GV	175	PX319-030GV	175	PX329-030GV	215
0 to 3.4	0 to 50	PX309-050GV	175	PX319-050GV	175	PX329-050GV	215
0 to 6.9	0 to 100	PX309-100GV	175	PX319-100GV	175	PX329-100GV	215
0 to 10	0 to 150	PX309-150GV	175	PX319-150GV	175	PX329-150GV	215
0 to 14	0 to 200	PX309-200GV	175	PX319-200GV	175	PX329-200GV	215
0 to 21	0 to 300	PX309-300GV	175	PX319-300GV	175	PX329-300GV	215
0 to 34	0 to 500	PX309-500GV	175	PX319-500GV	175	PX329-500GV	215
0 to 69	0 to 1000	PX309-1KGV	175	PX319-1KGV	175	PX329-1KGV	215
0 to 138	0 to 2000	PX309-2KGV	175	PX319-2KGV	175	PX329-2KGV	215
0 to 207	0 to 3000	PX309-3KGV	175	PX319-3KGV	175	PX329-3KGV	215
0 to 345	0 to 5000	PX309-5KGV	175	PX319-5KGV	175	PX329-5KGV	215
0 to 517	0 to 7500	PX309-7.5KGV	175	PX319-7.5KGV	175	PX329-7.5KGV	215
0 to 690	0 to 10,000	PX309-10KGV	175	PX319-10KGV	175	PX329-10KGV	215

Comes with certificate of conformance to specifications. **Notes:** 1. Units 100 psig and above may be subjected to vacuum on the pressure port without damage. 2. For alternative performance specifications to suit your application, contact Engineering.

Ordering Examples: PX309-100GV, 100 psi gage pressure transducer with 100 mV output @ 5 Vdc excitation and 1.5 m cable termination, \$175. PX319-015AV, 15 psi absolute pressure transducer with 100 mV output @ 10 Vdc excitation and Mini DIN termination, \$175. PX329-3KGV, 3000 psi gage pressure transducer with 100 mV output @ 5 Vdc excitation and twist-lock termination, \$215. Mating connector sold separately; order PT06V-10-6S, \$26.50. Consult Sales for OEM pricing.

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION
-NIST	\$75.00	5-point NIST-traceable calibration (must be ordered with new transducer)
CAL-3	150.00	Recalibration: 5-point NIST traceable
PT06V-10-6S	26.50	Mating connector for PX329
CA-39-4PC22-5	90.00	4-conductor mating twist-lock connector with 1.5 m (5') cable for PX329
CX5302	15.00	Extra Mini DIN connector for PX319
ES-2272	190.00	Reference Book: Handbook of Heating, Ventilation, and Air Conditioning

Starts at
\$175



- ✓ Gage or Absolute Pressure
- ✓ Low Pressure to 1 psig
- ✓ Rugged Solid State Design
- ✓ All Stainless Steel Construction
- ✓ High Stability, Low Drift
- ✓ 0.25% Accuracy Typical

100 mV Output Specifications

Excitation:

0 to 50 psig and All psia Ranges:

10 Vdc (ratiometric), (5 to 12 Vdc limits)

100 to 10,000 psig Ranges:

5 Vdc (ratiometric), (3 to 10 Vdc limits)

Output: 0 to 100 mV, except

2 psi = 40 mV and 1 psi = 20 mV

Accuracy: ±0.25% typical; includes linearity, hysteresis and repeatability

Zero Offset: ±2% FSO;

±4% 1 and 2 psi ranges

Span Setting: ±2% FSO;

±4% 1 and 2 psi ranges

Compensated Temperature: 0 to 50°C (-18 to 122°F)

Thermal Zero and Span Effects

(Over Compensated Range):

15 to 10,000 psi Ranges: ±2% FSO

5 psi Range: ±3% FSO

2 psi Range: ±4% FSO

1 psi Range: ±5% FSO



↓
PRESSURE TRANSDUCERS
mV OUTPUT

B

omega.co.uk[®]

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

www.omega.co.uk



UNITED STATES

www.omega.com

1-800-TC-OMEGA
Stamford, CT.

UNITED KINGDOM

www.omega.co.uk

Manchester, England
0800-488-488
+44-(0)161-777-6611

CANADA

www.omega.ca

Laval(Quebec)
1-800-TC-OMEGA

FRANCE

www.omega.fr

0800-466-342

GERMANY

www.omega.de

Deckenfronn, Germany
0800-8266342

BENELUX

www.omega.nl

0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters